

Expectancy theory

Wishful thinking.

Ananya Bhattacharya

I conceived then that, irrespective of the brutal history of our species and the multifarious dark, disturbing truths revealed to us in the natural sciences by studies of the human mind and instincts, the world was perfectible. Not through a long, desperate and tenacious struggle against our own fell natures but simply because a large enough number of well-intentioned folk wished it to be.

— Jacques Monad, Journals Vol. III (2003–2006)

Expectancy theory, the scientific hypothesis that ended science and permanently changed the lives of every member of the human race, grew out of a single line of mathematics scribbled down hastily in the journals of the former sociologist Jacques Monad.

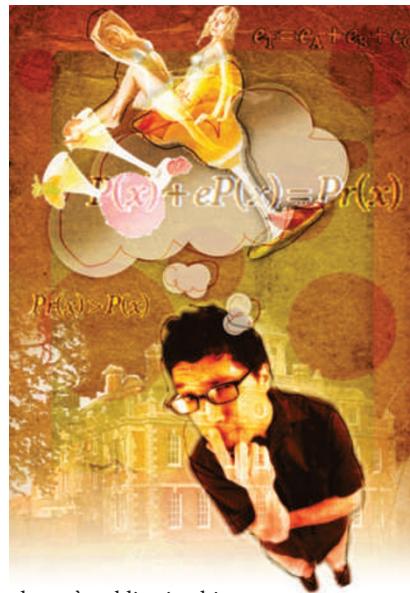
At the time of his groundbreaking work, Monad was a 43-year-old tax accountant living in Basingstoke, but he claimed he had drawn the rule out of the surveys he carried out as a PhD student at the University of Liverpool. Although he spent four years conducting research, his doctoral thesis — ‘Study of the effects of alcohol consumption on the behaviour of single females: an examination of contemporary Merseyside mating rituals’ — was never completed. Monad was thrown out of the university amid claims, always denied by him but, oddly, never contested formally, of scientific misconduct.

The simple law he formulated — the law of modified probability — still lies at the heart of even the most complex papers of expectancy theory. It can be stated mathematically as follows:

$$P(x) + eP(x) = P_r(x) \quad (1)$$

where $P(x)$ is the probability of an event x occurring in the absence of anyone hoping that it will happen, e is the expectancy index and $P_r(x)$ is the actual probability of the event occurring once the full expectation of event x has been taken into account.

It is possible that Monad himself did not perceive the true significance of what he wrote that night. In an interview shortly after his theory was published, Monad said that the law came to him after he had had “a few too many one evening”. A few months later, Monad seemed to have changed his mind. “It was divine inspiration,” he said. “I was truly touched by the hand of God.” A statement he was to repeat many times. The



theory’s publication history is itself notorious. Rejected by *Nature* as “a cock-and-bull story that could only have been dreamed up by a madman”, it was swiftly accepted the following week by *Science*, which in an editorial referred to it as “a landmark”.

The theory is simple enough but many fail to grasp it immediately because of its counter-intuitive implications. The expectancy index e , in particular, requires further explanation. It is a measure of the effect a human mind can have on the course of natural events by wishing them to be a certain way. In most situations it is, of course, negligibly small. It was found, however, that in certain circumstances, if enough people wish for something to be true, the probability that it becomes true rises significantly. This is because e is a cumulative quantity. Thus if three people, A, B and C, wish for the same event, the total expectancy index e_T is a sum of their individual expectancy indices:

$$e_T = e_A + e_B + e_C \quad (2)$$

When the total expectancy is a positive value, Equation 1 becomes:

$$P_r(x) > P(x) \quad (3)$$

This astonishing result has profoundly changed the way we think about the world and ourselves. Science has largely been discarded as the cheerless product of unimaginative minds. The theory of evolution, a particularly diseased example of the genre, was trashed first. Now we no longer regard

ourselves as hairless monkeys desperately trying to cope with a somewhat oversized brain, and as a result we also abandoned the field of sociobiology, with its less than flattering findings about human nature.

In their place, we have adopted a more edifying view: that we are beings designed by an all-powerful intelligence. As a result of certain shortcomings of the human brain, which we are trying very hard to wish away at the moment, the nature of this entity remains somewhat nebulous.

We, as a people, aided by the exceptionally wishful thinking of a few radical feminists, also went on to free ourselves of all gender differences. We no longer have sexual organs, choosing to divide whenever we feel the urge to reproduce. The umbilicus, a vestigial reminder of our undignified past, became our chief pleasure-giving organ. We can now attain orgasm at any time of the day or night simply by prod- ding ourselves in the navel.

In fact, in the light of Monad’s equations, we had to revise the history of science completely, as space and time had warped to fit the hypotheses of physicists. It seemed that science had been a social construct in a way that not even the most devoted advocates of science studies had comprehended. The Universe began to run more like clock-work after Newton wrote down his equations of motion. In retrospect, expectancy theory provides the only explanation of why Einstein’s preposterous ideas came to be borne out by experiments. After all, he had remarkable charisma.

Recently, we have abandoned the old systems of governance, which at their most absurd led to a confederacy of unelected oil barons ruling the richest and most powerful nation on Earth. Instead we operate by a new principle: we, the people, get what we want. We are proud of this new arrangement and have named it ‘democracy’.

And what has become of Jacques Monad? He has joined the ranks of the immortals. Quite literally, as we all now live forever. Monad has wished into existence a replica of the mansion built by the late-twentieth-century media mogul Hugh Hefner. It is complete in every detail. Puzzlingly, he still chooses to reproduce in the old-fashioned way. ■

Ananya Bhattacharya is *Nature*’s online news editor, where he wishes that great stories would arrive perfectly formed every day.

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